DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013250 Address: 333 Burma Road **Date Inspected:** 28-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhao Chen Sun **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** Tower Trial Assembly

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector observed the following work in progress:

EAST TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 049220, 040704 Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin D outside, bearing plate. Joint identified as ESD1-SA296-B/E-14, 15, 29. ZPMC QC Identified as Xing Shin Shun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 040609, 040713,049541, Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin C outside, bearing plate. Joint identified as ESD1-SA294-F/G-36, 42, 55, 64. ZPMC QC Identified as Xing Shin Shun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 053316, 046706, Perform Flux Core Arc Welding (FCAW) on East Tower lift 1 skin E outside, bearing plate. Joint identified as ESD1-SA227-F/H-40, 34. ZPMC QC Identified as Fu Wei Min, The welding parameters as measured using QC's calibrated instrument

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appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

WEST TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 042218, 205649, 040759 Perform Flux Core Arc Welding (FCAW) on West Tower lift 1 skin C outside, bearing plate. Joint identified as WSD1-SA294-F/G-63, 43, 37, ZPMC QC Identified as Lu Wei Chao, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

During random Visual inspection This QA Inspector observed, inside the West tower lift 1 bearing plate welding found porosity at 7 locations in one weld. Weld joint identified as WSD1-SA294F/G-17. And weld cracked found in between running plate and bearing plate weld. Weld joint identified as WSD1-SA294F/G-23. For more information see below attach photos.

This QA Inspector observed ZPMC qualified welding personnel identified as 251194, 044541. Perform Shielded Metal Arc Welding (SMAW) on West Tower lift 1 B/C corner joint outside, Shearing plate welding. Joint identified as WSD1-A423A/H-2, 1. ZPMC QC Identified as Zhu Yuan Yuan. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2313-Tc-P4.

NORTH TOWER LIFT 1

During random Visual inspection This QA Inspector observed ZPMC MT Inspector performed Magnetic Particle Inspection on base metal of North tower lift 1 skin C and D after removing temporary attachment.

SOUTH TOWER LIFT 1

This QA Inspector observed ZPMC qualified welding personnel identified as 069082, 068858. Perform Flux Core Arc Welding (FCAW) on South Tower lift 1 skin D outside, bearing plate. Joint identified as SSD1-SA40-B/E-43, 32, ZPMC QC Identified as Lu Wei Chao, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 069043, 057244, Perform Flux Core Arc Welding (FCAW) on South Tower lift 1 skin E outside, bearing plate. Joint identified as SSD1-SA16-F/G-30, 40, ZPMC QC Identified as Fu Wei Min, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F. For more information see below attach photo.

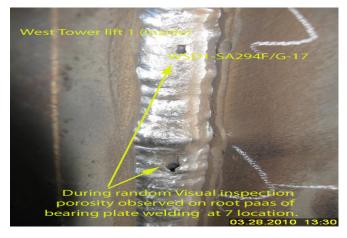
Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer